REMARKS

Claims 1-15 are pending and under examination. The rejection of claims 1-15 under 35 U.S.C. 112, 2nd paragraph for being indefinite is respectfully traversed in view of the amendments offered with this response. The suggestions for amendment made by the Examiner on pages 2 and 3 of the Office Action have been adopted by Applicant and are incorporated into the amendments of the claims.

The rejection of the claims 1-4, 6-7 and 10-15 under 35 U.S.C. 102(b) or in the alternative under 35 U.S.C. 103(a) over EP '305 is respectfully traversed.

The primary reference, EP 0 676 305, at first sight discloses a tyre having an inside portion of the tread having a wide circumferential groove (5) having a width of at least 35mm. However, the wide groove (5) has a very special shape in that only one groove wall extends straight from the bottom edge of the circumferential wide groove to the outer surface of the tread part as set out on page 2 at lines 43 to 44. The other side of the wide groove (5) in the specification and in the claims specifically is shaped so as to be curved and convex outwardly in the tyre radial direction from the bottom edge of the circumferential wide groove (5). It is also smoothly connected to the outer surface (11) of the tread part (2). Thus the wall (9) is an arcuate groove wall, (see page 3, line 27). At page 3, line 32, the effect of the

arcuate shape is mentioned to give a ground contacting tread area (F2) which is substantially curved as shown in Figure 4. In fact the particular shape of this is specified to be when the tyre is normally loaded. Furthermore at page 4, lines 4 to7, the effect of this gradual increase in groove depth is set out to be to give improved water discharge performance on the tread surface so that the wet grip performance is enhanced. The invention in fact requires an arcuate groove wall (5) and this is further emphasized at page 4, line 8 to 10, where the possible shapes are mentioned. As a result, groove (5) is only a wide circumferential groove in the new tyre condition. The average width of the groove therefore is much less and what is more is only a wide circumferential groove for a small part of the depth of the groove (5).

Thus, EP '305 in teaching reduction in pass-by noise at page 4, line 19, is in reality only teaching it for the special groove shape disclosed, which of course will give a different shaped air column to generate resonance.

In contrast to the teaching of EP '305, the present specification discloses that the present invention has its super wide groove (4) formed by sidewalls which are slightly inclined, see page 6 four lines from the bottom. Thus, the sidewalls are conventional sidewalls for grooves and not the very special curved sidewall groove of EP '305. It is therefore argued that the present invention is not only novel but surprisingly inventive over

EP '305 as the said European Patent goes to such lengths to teach the essential nature of the curved sidewall in a groove which is only wide at the tread surface.

The rejection of claims 5, 7, 8, 9 and 11-15 are respectfully traversed in view of the foregoing arguments as to the primary reference and the following with respect to the secondary references.

US 5,425,406 SWIFT in fact relates to a tyre having three distinct zones and discloses a wide groove (6) which is an "aquachannel". "Aquachannel" is defined in column 2 at lines 6 to 9 as a specially shaped wide circumferential groove with very curved groove walls at each side. It is designed specifically to channel water out of the footprint of the tyre. Thus, the tyre is very different from the present invention. Motivation to combine SWIFT et al. and EP '305 thus appears to be lacking.

US 3,682,220 VERIDER does disclose in Figure 4 provision of a rib (81) at the base of the groove and in another embodiment in Figures 6 and 7 a side reinforcement rib (70) at the base of the groove. The disclosure is very much that these are to prevent weakening of the tread in wide longitudinal grooves, see column 1, lines 46 to 51. However, the combination with EP '305 would not lead to the presently claimed invention for reasons stated above.

US 5,679,185 TANAKA - this reference discloses provision of a groove having a width more than 16% of the ground contacting width

(TW) in a tyre tread. The groove may be central, see Figures 5 and 6, or there may be two grooves, one either side of the centerline, see Figure 1. Admittedly in the two grooved construction the tyre is asymmetrical as one of them can have a zigzag configuration but both grooves are wide. The Examiner is also correct that narrow grooves having a width of less than 8% of TW also have reduced noise.

US 5,327,952 (GLOVER et al.) is combined with EP '305 but in view of the amendment to claim 1 and distinction in the amended claims discussed hereinabove it is urged respectfully that the present claims are allowable over the references.

In summary, therefore, it is argued that EP '305 does not disclose the combination of groove widths and position set out in the amended claim of the present application. The specific teaching of the citation in fact teaches that the groove must have a very specially shaped sidewall to provide the advantages and that this works specifically by generating a curvature in the contact patch at the side of the wide groove. The present invention is therefore considered not only novel but inventive over the citations.

Reconsideration of the rejection of all claims is accordingly respectfully solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully

requested to contact Edward H. Valance (Reg. No. 19,896) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By Edward H. Valance #19896
FOR Joseph A. Kolasch, #22,463

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

JAK/EHV/jmb
0656-0249P

Attachment: Version with Markings to Show Changes Made

(Rev. 02/20/02)

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 3,6 and 8 have been canceled.

The claims have been amended as follows:

1. (Amended) Vehicle tyre having a non-uniformly profiled tread with respect to its center [(6)], characterised in that one tread half[, in particular the inwardly disposed tread half (2) related to the vehicle,] has at least one circumferential superwide groove [(4)] having a width of at least [30] 35 mm and in that the width of the narrower grooves in said superwide groove is 10 mm or less and the other tread half[, in particular the outwardly disposed tread half (3),] has at least two circumferential narrower grooves [(5)] in comparison thereto [which likewise extend over the tyre circumference], with the superwide groove [(4)] being at least twice as [broad] wide as the broadest of the narrower grooves [(5).], and in that the superwide groove is disposed in the inner half of the one tread half, and the sidewalls of the circumferential grooves are slightly inclined.

5. (Amended) Vehicle tyre in accordance with claim 1, characterised in that the spacings from the center of the tyre of the respective inwardly disposed side walls [(7, 8)] of the superwide groove [(4)] and of the narrower groove [(5)] adjacent to

it in the [outwardly disposed] other tyre tread half [(3)] are at least substantially the same.

7. (Amended) Vehicle tyre in accordance with claim 1, characterized in that the superwide groove [(4)] has a varying depth when considered over its width[.], wherein the base of the superwide groove has a plateau in the central region which is bounded on both sides by deepened regions.

9. (Amended) Vehicle tyre in accordance with claim 1, characterized in that the superwide groove [(4)] in the inwardly disposed tyre tread half [(2)] has a width of approximately 40 mm and [two circumferential] each of the narrower grooves [(5)] have [with] a width of approximately 8 mm in each case [are provided in the outwardly disposed tyre tread half (3)].

10. (Amended) Vehicle tyre in accordance with claim 1, characterised in that the tread regions between the grooves [(4, 5)] and to the side of the grooves [(4, 5)] are provided with grooves [(11)] and/or fine cuts which extend obliquely to the circumferential direction of the tyre at least outside of the [tyre] shoulder regions of the tyre [(12) and preferably with changing inclination].

11. (Amended) Vehicle tyre in accordance with claim 1, characterized in that the circumferential grooves [(4, 5)] are connected together at least in part by oblique grooves [(11)].

12. (Amended) Vehicle tyre in accordance with claim 11, characterized in that the inclination of the oblique grooves [(11)] relative to the tyre circumferential direction reduces towards the tyre shoulders [(12)].

13. (Amended) Vehicle tyre in accordance with claim 1, characterized in that the grooves [(11)] extending obliquely to the circumferential direction of the tyre have different depths over their longitudinal extent and in particular a depth which increases or first increases and then reduces towards the tyre shoulders [(12)].

14. (Amended) Vehicle tyre in accordance with claim 13, characterized in that at least the majority of the obliquely extending grooves [(11)] is made continuously curved.

15. (Amended) Vehicle tyre in accordance with claim 1, characterized in that additional circumferential grooves [(13)], the width of which only amounts to a fraction of the narrow grooves

[(5)] are provided in addition to the superwide groove [(4)] and to the grooves [(5)] which are narrow in comparison thereto.